

**What is claimed is:**

1. *Sub A2* 1. A method for manufacturing a multi-layered ceramic substrate,  
2. said method comprising the steps of:  
3. forming a shrinkage suppression sheet on both faces of an unfired  
4. green sheet laminated body;  
5. firing said green sheet laminated body on which said shrinkage  
6. suppression sheet is formed on its both faces; and  
7. removing said shrinkage suppression sheet by spraying at least one  
8. of ceramic powder and water together with compressed air onto said shrinkage  
9. suppression sheet on both faces of said green sheet laminated body after firing.  
10.

1. 2. The method for manufacturing a multi-layered ceramic substrate  
2. as defined in Claim 1, wherein said ceramic powder is made of the same material  
3. as the main constituent of a material used for said shrinkage suppression sheet.  
4.

1. 3. The method for manufacturing a multi-layered ceramic substrate  
2. as defined in Claim 1, wherein the sintering temperature of said shrinkage  
3. suppression sheet is higher than the sintering temperature of said green sheet  
4. laminated body.  
5.

1. 4. The method for manufacturing a multi-layered ceramic substrate  
2. as defined in Claim 1, wherein the pressure of said compressed air is between 3.0  
3. and 5.5 kgf/cm<sup>2</sup>.  
4.

*5*  
1 2 3 4 5 6 7 8 9  
5. The method for manufacturing a multi-layered ceramic substrate  
as defined in Claim 1, wherein a mean particle size of said ceramic powder is not  
greater than 10 µm.

1 2 3 4 5 6 7 8 9  
1 2 3 4 5 6 7 8 9  
6. The method for manufacturing a multi-layered ceramic substrate  
as defined in Claim 1, wherein a mean particle size of said ceramic powder is  
between 0.1 and 150 µm.

1 2 3 4 5 6 7 8 9  
1 2 3 4 5 6 7 8 9  
*Sub A2* 7. The method for manufacturing a multi-layered ceramic substrate  
as defined in Claim 1, wherein at least one of said ceramic powder and water is  
sprayed together with compressed air onto said shrinkage suppression sheet on  
both faces of said green sheet laminated body simultaneously after firing.

1 2 3 4 5 6 7 8 9  
1 2 3 4 5 6 7 8 9  
8. The method for manufacturing a multi-layered ceramic substrate  
as defined in Claim 1, wherein said sprayed ceramic powder is collected for reuse  
in spraying.

1 2 3 4 5 6 7 8 9  
1 2 3 4 5 6 7 8 9  
9. A method for manufacturing a multi-layered ceramic substrate in  
which a shrinkage suppression sheet is formed on both faces of unfired laminated  
green sheets before firing, and said shrinkage suppression sheet is removed after  
sintering; wherein said shrinkage suppression sheet is removed by spraying at least  
one of water, ceramic powder, and a mixture of ceramic powder and water together  
with compressed air.

1           Sub  
2           A3      10. The method for manufacturing a multi-layered ceramic substrate  
3      as defined in Claim 9, wherein the pressure of said compressed air is between 3.0  
4      and 5.5 kgf/cm<sup>2</sup>.

1           11. The method for manufacturing a multi-layered ceramic substrate  
2      as defined in Claim 9, wherein a mean particle size of said ceramic powder is not  
3      greater than 10 µm.

1           12. The method for manufacturing a multi-layered ceramic substrate  
2      as defined in Claim 9, wherein a mean particle size of said ceramic powder is  
3      between 0.1 and 150 µm.

1           Sub  
2           A4      13. The method for manufacturing a multi-layered ceramic substrate  
3      as defined in Claim 9, wherein said ceramic powder mixed with said compressed  
4      air and water is made of the same material as the main constituent of a material  
5      used for said shrinkage suppression sheet.  
  
      Fix C5